

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/802,529	03/17/2004	Thomas J. Bachinski	12929.1144US01	3514	
7.	590 11/16/2005		EXAM	INER	
Merchant & Gould P.C. P.O. Box 2903			LEE, JINHEE J		
Minneapolis, MN 55402-0903			ART UNIT	PAPER NUMBER	
			2831		
			DATE MAILED: 11/16/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
065 - A - 4' O	10/802,529	BACHINSKI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jinhee J. Lee	2831					
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on <u>02</u>	September 2005.						
· <u>-</u>	'-						
closed in accordance with the practice under	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims			:				
4) Claim(s) 1-15,32 and 33 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-15,32 and 33 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers	•						
9) The specification is objected to by the Examir	ner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to th	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s) is ob	ejected to. See 37 CFR 1.121(d)	١.				
11)☐ The oath or declaration is objected to by the l	Examiner. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents. 3. Copies of the certified copies of the priority documents. * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat fority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage					
Attachment(s)	Λ∏ (Ex. 12 Δ)	· (DTO 442)					
1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail D						
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	8) 5) Notice of Informal F 6) Other:	Patent Application (PTO-152)					

Art Unit: 2831

DETAILED ACTION

Claim Objections

1. Claims 1, 4, 5, 7, 32 and 33 are objected to because of the following informalities:

Claim 1 line 7-8, the phrase "the the" has grammatical error. Examiner suggests "the" instead to correct the grammatical error.

Claim 1 line 8, the phrase "the elongate members" has an error. Examiner suggests "the elongate conductors" instead to avoid insufficient antecedent rejection.

Claim 4 line 2, the phrase "the elongate members in" has an error. Examiner suggests "the elongate conductors is" instead to avoid insufficient antecedent rejection.

Claim 5 line 2, the phrase "elongate members" has an error. Examiner suggests "elongate conductors" instead to avoid insufficient antecedent rejection.

Claim 7 line 11, the phrase "the elongate members" has an error. Examiner suggests "the elongate conductors" instead to avoid insufficient antecedent rejection.

Claim 32 line 3-4, the phrase "the heat sensitive device" has an error. Examiner suggests "a heat sensitive device" instead to avoid insufficient antecedent rejection.

Claim 33 line 2, the phrase "the interior" has an error. Examiner suggests "an interior" instead to avoid insufficient antecedent rejection.

Claim 33 line 3-4, the phrase "the first cable member" has an error. Examiner suggests "the first wire member" instead to avoid insufficient antecedent rejection.

Appropriate correction is required.

Art Unit: 2831

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-6 and 32-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The added material which is not supported by the original disclosure is as follows:

In claim 1 line 5 and 8, and claim 32 line 11, the phrase "free ends", discloses new matter because, the original disclosure in specification nor drawings show free ends of the elongate member, they are connected by the heat sensitive material.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-3, 5-9 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Oravala (5638250).

Application/Control Number: 10/802,529

Art Unit: 2831

Re claim 1, Oravala discloses a connection system comprising a heat conductive structure (7, 8 lead conductor for example) configured to transfer a communication signal, the heat conductive structure including first and second elongate conductors (7, 8) aligned longitudinally with free ends of the elongate conductors adjacent to each other (see figures 1 and 2) and a connection point (9, fusible portion) coupled between the free ends of the elongate member, the connection point including a heat sensitive material (soldering part, column 3 lines 14-15 and lines 21-22 according to the numbering in the middle for example), wherein heat applied to the heat conductive structure modifies the heat sensitive material to thermally separate the free ends of the elongate members at the connection point (see column 3 lines 15-20).

Re claim 2, Oravala discloses a connection system further comprising a biasing member (9 with fuse wire for example) configured to apply a tension force at the connection point (see column 3 lines 15-19).

Re claim 3, Oravala discloses a connection system, wherein the heat sensitive material is a low temperature solder (see column 3 lines 15-19).

Re claim 5, Oravala discloses a connection system, wherein the first and second elongate members are configured as wire members (see column 4 lines 20-29) that are aligned coaxially.

Re claim 6, Oravala discloses a connection system, wherein the first wire member (7) is configured to extend through an exterior wall of a heat resistant container that houses the electronic device, and the second wire member (8) is configured to be

Application/Control Number: 10/802,529

Art Unit: 2831

ontion Number. 10/002,52

coupled to the electronic device stored in the heat resistant container (12 in 1 case, see figure 1).

Re claim 7, Oravala substantially discloses fireproof system for protecting a heat sensitive device, the system comprising:

a heat resistant container (case 1) having an internal chamber sized to house the heat sensitive device', and

a connection system (with 7) including a heat conductive structure that extends from outside the heat resistant container into the internal chamber of the heat resistant container,

the heat conductive structure (7, 8) being configured to transfer a communication signal from outside the heat resistant container to the heat sensitive device, the heat conductive structure including first and second elongate conductors (7, 8) aligned generally longitudinally and a connection point inside the internal chamber that includes a heat sensitive material (solder), the connection point (9 for example) being arranged between the elongate member, wherein the heat sensitive material is modified to thermally separate the elongate conductors when heated above a predetermined temperature by a heat source that is applied to that portion of the heat conductive structure positioned outside of the heat resistant container (see figure1 for example).

Re claim 8, Oravala discloses of a system further comprising a biasing member (9) configured to apply a tension force to the heat conductive structure at the connection point.

Art Unit: 2831

Re claim 9, Oravala discloses a system wherein the heat resistant container includes an aperture (unnumbered including aperture through 4 and 2) extending between the interior and an exterior of the heat resistant container, the system further comprises a heat resistant feed-through member (13 for example) that extends through the aperture, and the first cable member extends through the heat resistant feed-through member (see figure 1).

Re claim 15, Oravala discloses a system, wherein the heat conductive structure is integral with an exterior wall (1) of the heat resistant container (see figure 1).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35.U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oravala in view of Bone et al. (6317307).

Page 7

Re claim 4, Oravala substantially discloses a connection system as set forth in claim 1 above. Oravala does not explicitly disclose wherein at least one of the elongate members is configured as a co-axial cable. However, Bone et al. teaches of a connection system with a co-axial cable (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the co-axial cable of Bone et al. on the system of Oravala in order to provide co-axial terminals.

7. Claims 10-14 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oravala in view of Hastings et al. (4748915).

Re claim 10, Oravala substantially discloses a system as set forth in claim 7 above. Oravala does not explicitly disclose that the heat sensitive device is a computer hardware device. However, Hastings et al. teaches of a heat sensitive device that is a computer hardware device (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the heat sensitive device that is a computer hardware device of Hastings et al. on the system of Oravala in order to provide protection to the computer system.

Re claim 11, Oravala substantially discloses a system as set forth in claim 9 above. Oravala does not explicitly disclose a heat resistant adhesive positioned within the heat resistant feed-through adjacent to the heat conductive wire. However, Hastings et al. teaches of a heat resistant adhesive positioned within the heat resistant feed-through adjacent to the heat conductive wire (see column 23 line 56 for example).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the heat resistant adhesive positioned within the heat resistant feed-through adjacent to the heat conductive wire of Hastings et al. on the system of Oravala in order to prevent the movement of the conductor from the container.

Re claim 12, Oravala substantially discloses a system as set forth in claim 7 above. Oravala does not explicitly disclose a heat resistant container comprising first and second housing members defining the internal chamber, the first and second housing members being sealed together with a heat resistant sealant. However, Hastings et al. teaches of a heat resistant container comprising first and second housing members (225a and b) defining the internal chamber, the first and second housing members being sealed together with a heat resistant sealant (column 24 lines 7-16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the heat resistant container comprising first and second housing members defining the internal chamber, the first and second housing members being sealed together with a heat resistant sealant of Hastings et al. on the system of Oravala in order to provide additional fire protecting layer.

Re claim 13, Oravala substantially discloses a system as set forth in claim 9 above. Oravala does not explicitly disclose a heat resistant container that includes a ceramic fiber and a binder material. However, Hastings et al. teaches of a heat resistant container that includes a ceramic fiber and a binder material (column 25 lines 15-22 for example). It would have been obvious to one having ordinary skill in the art at

the time the invention was made to use the heat resistant container that includes a ceramic fiber and a binder material of Hastings et al. on the system of Oravala in order to provide additional fire protecting layer.

Re claim 14, note that Oravala discloses a system, wherein the heat conductive structure is integral with an exterior wall (1) of the heat resistant container (see figure 1).

Re claim 32, Oravala substantially discloses a system comprising a heat resistant container having an internal chamber sized to house the heat sensitive device, a connection system comprising: a heat conductive structure that extends from outside the heat resistant container (12 with 1) into the internal chamber of the heat resistant container, the heat conductive structure being configured to transfer a communication signal from outside the heat resistant container to a device, the heat conductive structure including first and second wire members (7, 8) aligned longitudinally with free ends of the wire members positioned adjacent to each other; a connection point positioned inside the internal chamber that includes a heat sensitive material, the connection point being arranged between the free ends of the wire members; and a biasing member (9) configured to apply a tension force longitudinally to at least one of the wire members at the connection point; wherein the heat sensitive material is modified to thermally separate the wire members when heated above a predetermined temperature by a heat source that is applied to that portion of the heat conductive structure positioned outside of the heat resistant container. Oravala does not explicitly disclose a heat sensitive device having a rectangular shaped external surface and that the heat resistant container includes a compression molded material that includes a

Art Unit: 2831

ceramic fiber and a binder and that the communication signal is to a computer hardware device. However, Hastings et al. teaches of a the heat resistant container that includes a compression molded material with ceramic fiber and a binder (column 25 lines 15-22 for example) and that the communication signal is to a computer hardware device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the heat resistant container that includes a compression molded material with ceramic fiber and a binder of Hastings et al. on the system of Oravala in order to provide additional fire protecting layer. Furthermore, note that a person having ordinary skill in the art would have found it obvious to modify the heat sensitive device of Oravala to the claimed rectangular shape. A change in shape or configuration is generally recognized as being within the level of ordinary skill in the art. *In re Daily*, 149 USPQ 47 (CCPA 1976).

Re claim 33, note that Oravala discloses wherein the heat resistant container (12 with 1) includes an aperture (unnumbered) extending between the interior and an exterior of the heat resistant container, the system further comprises a heat resistant feed-through member (13 for example) that extends through the aperture, and the first cable member (7) extends through the heat resistant feed-through member (see figure 1)

Response to Arguments

8. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J. Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M, T, Th and F at 6:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jinhee J Lee Patent Examiner Art Unit 2831

ij١